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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/942,782	10/02/97	SOLLICH	P BORL/0170.00

LM02/0912

EXAMINER

BOURKE, R

ART UNIT**PAPER NUMBER**

2762

*9***DATE MAILED:**

09/12/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/942,782	Applicant(s) Sollich, P.
	Examiner Kelvin E. Booker	Group Art Unit 2762

Responsive to communication(s) filed on Jul 3, 2000

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

Claim(s) 1-20 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) 12 is/are allowed.

Claim(s) 1-6, 8, 9, 11, and 15-20 is/are rejected.

Claim(s) 7, 10, 13, and 14 is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on Jul 3, 2000 is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

- received.
- received in Application No. (Series Code/Serial Number) _____.
- received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Response to Amendment

1. In the amendment filed July 3, 2000 (see paper no. 7 and 8), the following has occurred:
 - a. Applicant has amended figures 1(a), 1(b), and 2;
 - b. Applicant has amended claims 4, 12 and 19 with respect to initial office action; and
 - c. claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. **Claims 1-6, 8-9, 11 and 15-20** are rejected under 35 U.S.C. 102(a) as being clearly anticipated by McFedries, P., Visual Basic for Applications Unleashed.

As per claim 1, McFedries teaches of a method for assisting a user with inputting source code for a computer program, the method comprising:

- a. detecting a need for assisting the user with input for a source code module under development (see figure 1.8; and pages 21-22, IntelliSense pop-up menu);

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b. determining a current cursor position representing a location in the source code module where the user is currently providing input (see figure 1.8; and pages 22-23, listing and properties of available);

c. determining input items which are suitable for input in the source code module at the current cursor position (see figure 1.8; and pages 22-23, IntelliSense pop-up menu following period (“.”);

d. displaying to the user a list of the suitable input items (see figure 1.8; and pages 22-24, list of input items); and

e. in response to selection by the user of a particular item from a list, automatically completing input at the current cursor position (see figure 1.8; and pages 22-23, IntelliSense list and properties).

As per claim 2, McFedries does not explicitly teach of a method wherein the source code is compiled by a compiler into a program which executes on a target microprocessor.

However, this is deemed to be inherent to McFedries system as he addresses the usage of IntelliSense as a tool of Visual Basic within a development system. The McFedries system would not be effective if there did not exist a means for processing and compiling code.

As per claim 3, McFedries teaches of a method wherein the detecting step includes receiving a request from the user (see figure 1.8; and pages 21-23, IntelliSense options).

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As per claim 4, McFedries teaches of a method wherein the detecting step includes determining instances in the source code module where the system can automatically provide input (see figure 1.8; and pages 21-23, IntelliSense options).

As per claim 5, McFedries teaches of a method wherein the detecting step includes determining in the source code module, the use of a dot operator (see figure 1.8 and page 22).

As per claim 6, McFedries teaches of a method wherein the detecting step includes determining in the source code module use of a class variable which references a class member or method (see figures 1.8-1.10; and pages 21-24, module parameters).

As per claim 8, McFedries teaches of a method wherein the current cursor position in the source code module appears within an assignment statement, and wherein the list of suitable input items comprise a list of items which are assignment compatible (see pages 21-24).

As per claim 9, McFedries teaches of a method wherein the list of suitable input items comprises a list of variables defined within the source code module which can appropriately be inputted at the current cursor position (see pages 22-24, list of available methods).

As per claim 11, McFedries teaches of a method wherein the step of determining input items which are suitable for input in the source code module includes:

- a. determining which variables are within scope for the current cursor position (see pages 22-24, list of available properties and methods); and
- b. eliminating as a suitable input item any item that is not within scope for the current cursor position (see claim 11(a) above).

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As per claim 15, McFedries teaches of a method wherein the step of determining input items which are suitable for input in the source code module includes:

- a. determining a type of input expected at the current cursor position (see pages 22-24, list of available properties and methods); and
- b. determining variables within scope at the current cursor position which have a type compatible with the type of input expected at the current cursor position (see claim 15(a) above).

As per claim 16, McFedries teaches of a development system comprising:

- a. an integrated development interface including a code editor for inputting source code into a source code module being created (see figure 1.8); and
- b. means, responsive to the integrated development interface and the compiler, for assisting a user with input for a source code module under development, the means comprising:
 - I) means for determining a current context for source code being inputted (see pages 22-24, pop-up menu with list of available input);
 - ii) means for determining appropriate input for the determined current context (see claim 16(d)(I) above); and
 - iii) means for displaying to the user the determined appropriate input (see figures 1-8-1.11).

However, McFedries fails to explicitly teach of a system having a processor and a memory, and a compiler for compiling one or more source code modules into a computer program.

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However, this is deemed to be inherent to McFedries system as he addresses the usage of IntelliSense as a tool of Visual Basic within a development system. The McFedries system would not be effective if there did not exist a means for storage and compiling code.

As per claim 17, have the same limitations as claim 3, therefore the same rejections apply (see claim 3).

As per claim 18, McFedries teaches of a system wherein the means for assisting includes means for detecting a position in the source code module where the system can provide assistance (see claim 1(a)).

As per claim 19, McFedries teaches of a system wherein the current context comprises an assignment expression and wherein appropriate input comprises an item which is assignment compatible for the expression (see pages 22-24, list of properties and methods available for input).

As per claim 20, McFedries teaches of a system wherein the appropriate input comprises a variable having a data type which is assignment compatible for the expression (see pages 22-24, list of properties and methods available for input).

Allowable Subject Matter

4. **Claims 7, 10, 13 and 14** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The following is a statement of reasons for the indication of allowable subject matter: in the cited prior art, McFedries teaches of a method for using IntelliSense as user assisted tool in the code development process, but fails to explicitly address the issues of “skipping” compilation and referencing “nested data” with respect to cursor positioning and user input.

6. **Claim 12** is allowed.

Conclusion

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

8. An inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Booker whose telephone number is (703) 308-4088. The examiner can normally be reached on Monday-Friday from 7:00 AM-5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-1396.

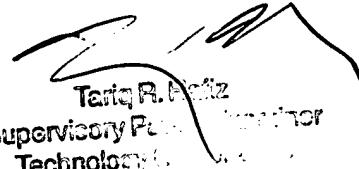
An inquiry of a general nature or relating to the status of this application proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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KEB

Patent Examiner

Group Art Unit 2762



Tariq R. Haliz
Supervisory Patent Examiner
Technology 6